

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
12 January 2006 (12.01.2006)

PCT

(10) International Publication Number  
WO 2006/004294 A1(51) International Patent Classification<sup>7</sup>: A61K 35/78,  
A23L 1/29120-819 (KR). **KO, Eun-Jung** [KR/KR]; 255-142, Imun  
3(sam)-dong Dongdaemun-gu, Seoul 130-827 (KR). **AN,**  
**Chang-Jun** [KR/KR]; 833-35, Bangbae 4(sa)-dong Seo-  
cho-gu, Seoul 137-834 (KR). **KIM, Hyun-Taek** [KR/KR];  
3-106, Hyundai Gugi-Villa Gugi-dong Jongno-gu, Seoul  
110-011 (KR). **HONG, Moo-Chang** [KR/KR]; 22-1601,  
Misung Apt. 408, Apgujeong-dong Gangnam-gu, Seoul  
135-110 (KR). **SHIN, Min-Kyu** [KR/KR]; 312-99,  
Hwicheong-dong Dongdaemun-gu, Seoul 130-090 (KR).(21) International Application Number:  
PCT/KR2005/000932

(22) International Filing Date: 31 March 2005 (31.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10-2004-0022413 31 March 2004 (31.03.2004) KR(74) Agent: **MAC PATENT & LAW FIRM**; 5th Floor,  
Hwaseung Bldg. 15-3, Yangjae-dong, Seocho-gu, Seoul  
137-130 (KR).(71) Applicant (for all designated States except US):  
**PURIMED CO., LTD.** [KR/KR]; 4th Floor, Minjok-  
tongil Bldg., 325-52 Imun2(i)-dong, Dongdaemun-gu,  
Seoul 130-831 (KR).(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,  
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,  
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.(72) Inventors; and  
(75) Inventors/Applicants (for US only): **BAE, Hyun-Su**  
[KR/KR]; 503-202, Mido 2-cha Apt. Banpo-dong  
Seocho-gu, Seoul 137-040 (KR). **KANG, Moon-Kyu**  
[KR/KR]; 301-2202, Buyeong Apt. 2-1, Donong-dong  
Namyangju-si, Gyeonggi-do 472-709 (KR). **OH,**  
**Jung-Wan** [KR/KR]; 108-1202, Sambu Apt. Su-  
jin-dong, Sujeong-gu Seongnam-si, Gyeonggi-do 461-180  
(KR). **CHO, Chong-Woon** [KR/KR]; 205, Ibam-ri  
Duma-myeon Gyeryong-si, Chungcheongnam-do 321-911  
(KR). **KIM, Chang-Sook** [KR/KR]; Na-101, Ihwa-Man-  
sion 590, Choji-dong, Danwon-gu Ansan-si, Gyeonggi-do  
425-864 (KR). **LEE, Hwa-Jin** [KR/KR]; 385-7, Imun  
2(i)-dong Dongdaemun-gu, Seoul 130-833 (KR). **SHIM,**  
**In-Sop** [KR/KR]; 301-1702, Geumho Apt. Yangji-maeul,  
Sunae-dong Bundang-gu Seongnam-si, Gyeonggi-do  
463-920 (KR). **JANG, Choon-Gon** [KR/KR]; 563-1006,  
Baekseol Jugong Apt., Jeongja-dong Jangan-gu Suwon-si,  
Gyeonggi-do 440-300 (KR). **CHOI, Hyun** [KR/KR];  
123-33, Bugahyeon 1(il)-dong Seodaemun-gu, Seoul(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.(54) Title: EXTRACT OF NELUMBINIS SEMEN FOR THE TREATMENT OF DEPRESSSION, MEDICINAL COMPOSITE  
AN DHEALTH FOODS INCLUDING THE EXTRACT OF NELUMBINIS SEMEN(57) Abstract: Disclosed are an extract of Nelumbinis Semen (*Nelumbo nucifera*) having an antidepressive effect, and a pharmaceutical composition and a health food for treating depression, comprising the extract. The Nelumbinis Semen extract is prepared by extracting Nelumbinis Semen with hot water. Animal behavioral and biochemical studies revealed that the Nelumbinis Semen extract has very strong antidepressive activity and is safe to the body while reducing the side effects of conventional antidepressants. Thus, the Nelumbinis Semen extract is applicable to a composition and a health food for treating depression.

WO 2006/004294 A1